WHAT IS CLAIMED IS:

1. A method for generating a detail-in-context presentation for an original image for display on a screen of a computer system, comprising:

receiving a signal from a user through a position tracking device coupled to the computer system to initiate the generation of the presentation; and,

distorting the original image to produce the presentation, the presentation having a distorted region to provide the user with detailed information for a region of the original image.

2. The method of claim 1 wherein the distorting includes:

establishing a lens surface for the distorted region; and,

transforming the original image by applying a distortion function defining the lens surface to the original image.

3. The method of claim 2 wherein the transforming includes projecting the presentation onto a plane.

4. The method of claim 3 wherein the signal includes a location for the lens surface within the original image.

5. The method of claim 3 wherein the signal includes a direction for a perspective projection for the lens surface.

6. The method of claim 3 wherein the establishing further includes displaying a graphical user interface ("GUI") over the distorted region for adjusting the lens surface by the user with the position tracking device.

7. The method of claim 6 wherein the lens surface includes a focal region and a shoulder region and the GUI includes at least one of: a slide bar icon for adjusting a magnification for the lens surface; a bounding rectangle icon with at least one handle icon for adjusting a size and a

shape for the focal region; a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for the shoulder region; a move icon for adjusting a location for the lens surface within the original image; a pickup icon for adjusting a location for the shoulder region within the original image; and, a fold icon for adjusting a location for the focal region relative to the shoulder region.

8. The method of claim 1 wherein the original image includes a two-dimensional image and a three-dimensional model.

9. The method of claim 1 wherein the position tracking device is an eye tracking device.

10. The method of claim 3 wherein the position tracking device is an eye tracking device and wherein the signal includes a depth for the lens surface within the original image proportional to a focal depth for the user measured by the eye tracking device.

11. The method of claim 1 wherein the screen includes a remote screen coupled to the computer system by a network.

12. A method for adjusting a detail-in-context presentation of an original image displayed on a screen of a computer system, comprising:

receiving a signal from a user through a position tracking device coupled to the computer system to adjust the presentation; and,

distorting the original image to produce an adjusted presentation for display on the screen, the adjusted presentation having a distorted region to provide the user with detailed information for a region of the original image.

13. The method of claim 12 wherein the distorting further includes:

establishing a lens surface for the distorted region; and,

transforming the original image by applying a distortion function defining the lens surface to the original image.

14. The method of claim 13 wherein the transforming includes projecting the adjusted presentation onto a plane.

15. The method of claim 14 wherein the signal includes an adjusted location for the lens surface within the original image.

16. The method of claim 14 wherein the signal includes an adjusted direction for a perspective projection for the lens surface.

17. The method of claim 13 wherein the establishing further includes displaying a graphical user interface ("GUI") over the distorted region for adjusting the lens surface by the user with the position tracking device.

18. The method of claim 17 wherein the lens surface includes a focal region and a shoulder region and the GUI includes at least one of: a slide bar icon for adjusting a magnification for the lens surface; a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for the focal region; a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for the shoulder region; a move icon for adjusting a location for the lens surface within the original image; a pickup icon for adjusting a location for the shoulder region within the original image; and, a fold icon for adjusting a location for the focal region relative to the shoulder region.

19. The method of claim12 wherein the original image includes a two-dimensional image and a three-dimensional model.

20. The method of claim 12 wherein the position tracking device is an eye tracking device.

21. The method of claim 14 wherein the position tracking device is an eye tracking device and wherein the signal includes a depth for the lens surface within the original image proportional to a focal depth for the user measured by the eye tracking device.

22. The method of claim 12 wherein the screen includes a remote screen coupled to the computer system by a network.

23. A method for generating a detail-in-context presentation of a region within an original image for display on a screen of a computer system, the region including a focal region and a shoulder region, comprising:

displaying a graphical user interface ("GUI") over the region for selecting at least one parameter for distorting at least one of the region, the focal region, and the shoulder region;

receiving a signal from a user through a position tracking device coupled to the computer system for adjusting the GUI to select the at least one parameter; and,

distorting the region in accordance with a distortion function and the at least one parameter to produce the presentation for display on the screen.

24. The method of claim 23 wherein the distorting includes projecting the adjusted presentation onto a plane.

25. The method of claim 24 wherein the at least one parameter includes a direction for a perspective projection for the distortion function.

26. The method of claim 24 wherein the at least one parameter includes at least one of: a magnification for the region; a size for the focal region; a size for the shoulder region; a shape for the focal region; a shape for the shoulder region; a location for the region within the original image; a location for the should region within the original image; and, a location for the focal region relative to the shoulder region.

27. The method of claim 26 wherein the GUI includes at least one of: a slide bar icon for selecting the at least one parameter for adjusting the magnification for the region; a bounding rectangle icon with at least one handle icon for selecting the at least one parameter for adjusting the size and the shape for the focal region; a bounding rectangle icon with at least one handle icon for selecting the at least one parameter for adjusting the size and the shape for the shoulder

region; a move icon for selecting the at least one parameter for adjusting the location for the region within the original image; a pickup icon for selecting the at least one parameter for adjusting the location for the shoulder region within the original image; and, a fold icon for selecting the at least one parameter for adjusting the location for the focal region relative to the shoulder region.

28. The method of claim 23 wherein the original image includes a two-dimensional image and a three-dimensional model.

29. The method of claim 23 wherein the position tracking device is an eye tracking device.

30. The method of claim 24 wherein the position tracking device is an eye tracking device and wherein the signal includes a depth for the distortion function proportional to a focal depth for the user measured by the eye tracking device.

31. The method of claim 23 wherein the screen includes a remote screen coupled to the computer system by a network.

32. A method for generating a detail-in-context presentation for an original image for display on a screen of a computer system, comprising:

receiving a signal from a user through a position tracking device coupled to the computer system to initiate the generation of the presentation; and,

distorting the original image to produce the presentation, the presentation having a distorted region to provide the user with detailed information for a region of the original image;

wherein the signal includes a location for the distorted region within the original image and a direction for a perspective projection for the distorted region.

33. The method of claim 32 wherein the distorting further includes:

establishing a lens surface for the distorted region; and,

transforming the original image by applying a distortion function defining the lens surface to the original image.

34. The method of claim 33 wherein the transforming includes projecting the adjusted presentation onto a plane.

35. The method of claim 33 wherein the establishing further includes displaying a graphical user interface ("GUI") over the distorted region for adjusting the lens surface by the user with the position tracking device.

36. The method of claim 35 wherein the lens surface includes a focal region and a shoulder region and the GUI includes at least one of: a slide bar icon for adjusting a magnification for the lens surface; a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for the focal region; a bounding rectangle icon with at least one handle icon for adjusting a size and a shape for the shoulder region; a move icon for adjusting a location for the lens surface within the original image; a pickup icon for adjusting a location for the shoulder region within the original image; and, a fold icon for adjusting a location for the focal region relative to the shoulder region.

37. The method of claim 32 wherein the original image includes a two-dimensional image and a three-dimensional model.

38. The method of claim 32 wherein the position tracking device is an eye tracking device.

39. The method of claim 34 wherein the position tracking device is an eye tracking device and wherein the signal includes a depth for the lens surface within the original image proportional to a focal depth for the user measured by the eye tracking device.

40. The method of claim 32 wherein the screen includes a remote screen coupled to the computer system by a network.